



Welcome!

Charlestown Navy Yard Environmental Assessment Public Meeting

**January 18, 2023
6:30 PM**



Charlestown Navy Yard (CNY) Virtual Meeting

-  **Throughout the presentation, your camera and microphone will be off.**
-  **Please send comments and/or questions via the Chat feature throughout the presentation.**
-  **Formal comments must be submitted through the CNY PEPC site.**
-  **If you have any computer issue, please use the Chat feature.**
-  **Please note this meeting is being recorded.**



Meeting Agenda

1. Introduction and Purpose of Meeting
2. Introduce the Navy Yard Partnership
3. Overview of Charlestown Navy Yard Master Development Strategy
4. Environmental Assessment
 - Alternatives Considered
 - Preferred Alternative
5. Questions, Comments, & Public Input



200 YEARS OF PROUD HISTORY...TIME TO REFRESH FOR A NEW GENERATION

From its inception as a naval shipyard in 1800, the Charlestown Navy Yard served the US naval fleet with distinction – proving its worth in each of the nation's wars through its critical role as a shipbuilding and repair facility and center of shipyard technology and innovation.

THE CHALLENGE – *An Era of Change*

In the 1960's, the Yard's role diminished as the Navy prepared for base closure. Prior to the Navy's departure and the NPS assuming ownership, there was little investment in the Yard's facilities and resources. In 1974, the NPS took on a tremendous maintenance challenge which has compounded over the decades. The park acquired 372,451 square feet of building space from the Navy, as well

as roads, parking lots, and marine facilities (dry docks, cranes and rail tracks, seawalls, piers, etc.). Many of these 30 acres of buildings and facilities present challenges to the NPS preservation and interpretation mission, while consuming a significant portion of the Park's annual budget. As a result of these challenges, the Park needs a creative and sustainable strategy for the Yard's stewardship.

THE SOLUTION – *Strategies for Stewardship*

The National Park Service implemented a two-fold approach to development of a master plan strategy:

1. Development of a Visitor Experience Plan to revitalize how the CNY story is told and how buildings and landscape features are preserved and used for interpretation.
2. Development of a Space Plan to propose strategies to consolidate—to the greatest degree possible—from the

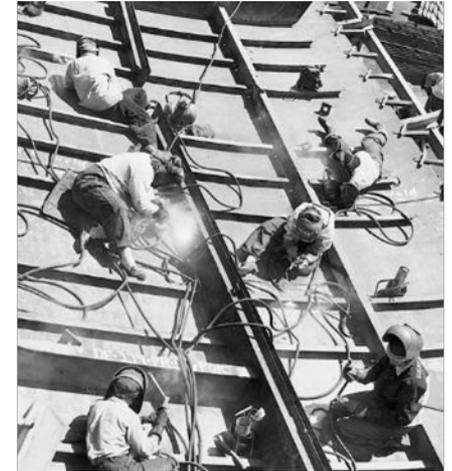
current decentralized, ad-hoc approach to existing space use.

A master plan for the Navy Yard campus creates efficiencies and collaborative opportunities for shared use of facilities, including shifts in the use and function of several buildings. Park staff and partners will occupy some key historic buildings, while others will be leased. The result would be a 40% reduction in the Park's footprint.



Key Facility Recommendations:

- Creation of a new Gateway Center to the Navy Yard along the Freedom Trail on Constitution Road that would include:
 - A combined visitor center and museum operation
 - A consolidation of park and USS Constitution Museum office spaces for employees
- Transference of Buildings 4/5 and 24 to the US Navy under a long-term agreement in exchange for Navy assuming full responsibility for the preservation and maintenance of the facilities.
- New maintenance facilities on CNY campus or alternatives tbd.
- An education/youth programming and campus meeting space in Building 22.
- Building 10 developed as a core CNY interpretive space.
- Visitor and Resources Protection operations would operate out of Building 28.
- Pier One would be activated for special events, visiting ships and other visitor amenities.
- Lease properties aimed at reducing the NPS operational footprint include Buildings 32, 107, Building 1, the Commandant's House and Pier 2.





Legend:

-  Boston NHP Navy Yard Boundaries
-  Boston Naval Shipyard NHL Boundary

CHALLENGES

*The Case for
Change*

- 45 Years of Ad Hoc Development
- Employee Offices and Housing in Poor Condition
- Need to Address Military Security Operations Within National Park Setting
- \$175M+ Deferred Maintenance
- Lack Collaborative Strategic Vision

GOALS

*NPS Investment
Strategy*

- Create World-Class Visitor Experience for All People
- Develop Strategic Plans that Allows NPS to be a Good Steward of Core CNY Historic Resources
- Establish Leasing Program to Generate Revenue and Reduce Deferred Maintenance
- Enhance Opportunities to Connect Public Access to Boston Harbor

Leasing RFPs

- National Park Service developed RFP's in 1999, 2014 and 2016 to explore interest in redeveloping the Hoosac Stores.
- Proposals included renovating the Hoosac with elements as a hotel, visitor center, Maritime Museum, parking garage, residential, retail, restaurant, education center, and U.S. Navy operations.
- No proposals were implemented

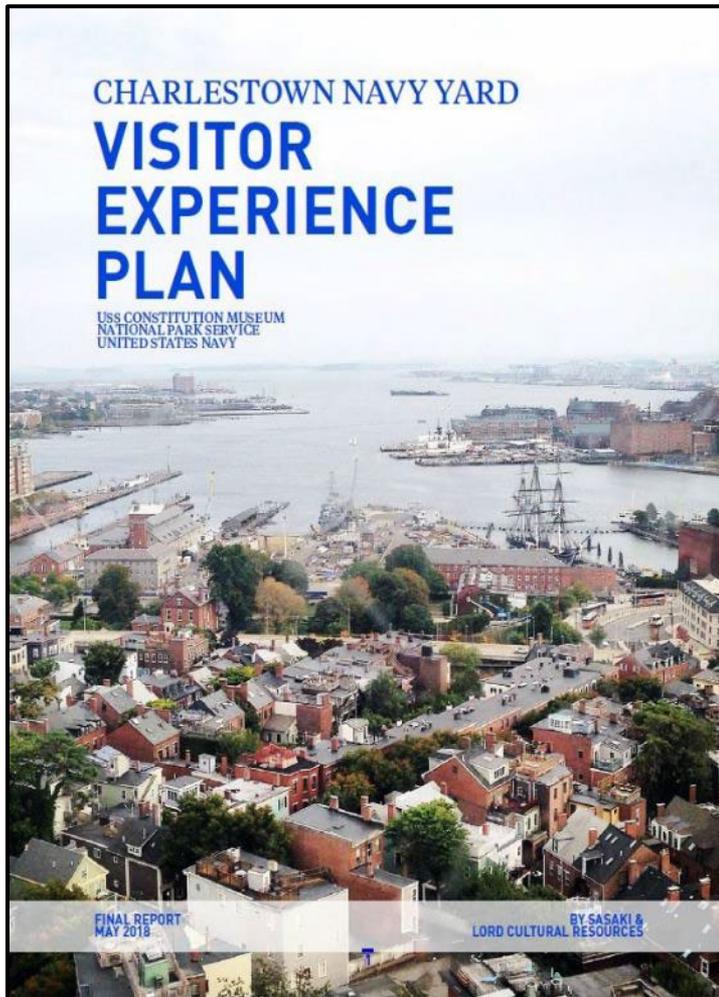
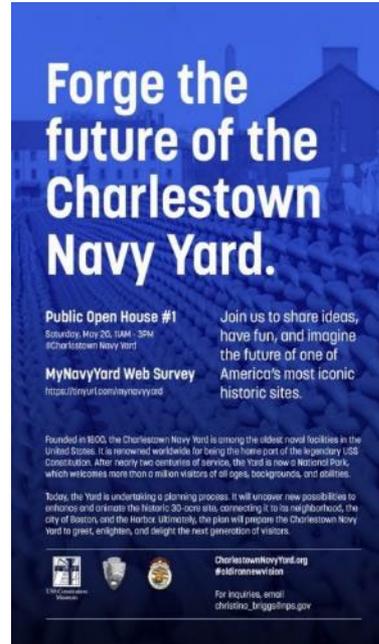
National Park Service
U.S. Department of the Interior

Boston National Historical Park
Boston, MA



Hoosac Stores Warehouse Request for Proposals February 14, 2014



**Forge the
future of the
Charlestown
Navy Yard.**

Public Open House #1
Saturday, May 20, 11AM - 3PM
@Charlestown Navy Yard

MyNavyYard Web Survey
<https://navyurl.com/mynavyyard>

Join us to share ideas,
have fun, and imagine
the future of one of
America's most iconic
historic sites.

Founded in 1800, the Charlestown Navy Yard is among the oldest naval facilities in the United States. It is renowned worldwide for being the home port of the legendary USS Constitution. After nearly two centuries of service, the Yard is now a National Park, which welcomes more than a million visitors of all ages, backgrounds, and abilities.

Today, the Yard is undertaking a planning process. It will uncover new possibilities to enhance and activate the historic 30-acre site, connecting it to its neighborhood, the city of Boston, and the historic 60-acre site. The plan will prepare the Charlestown Navy Yard to greet, enlighten, and delight the next generation of visitors.

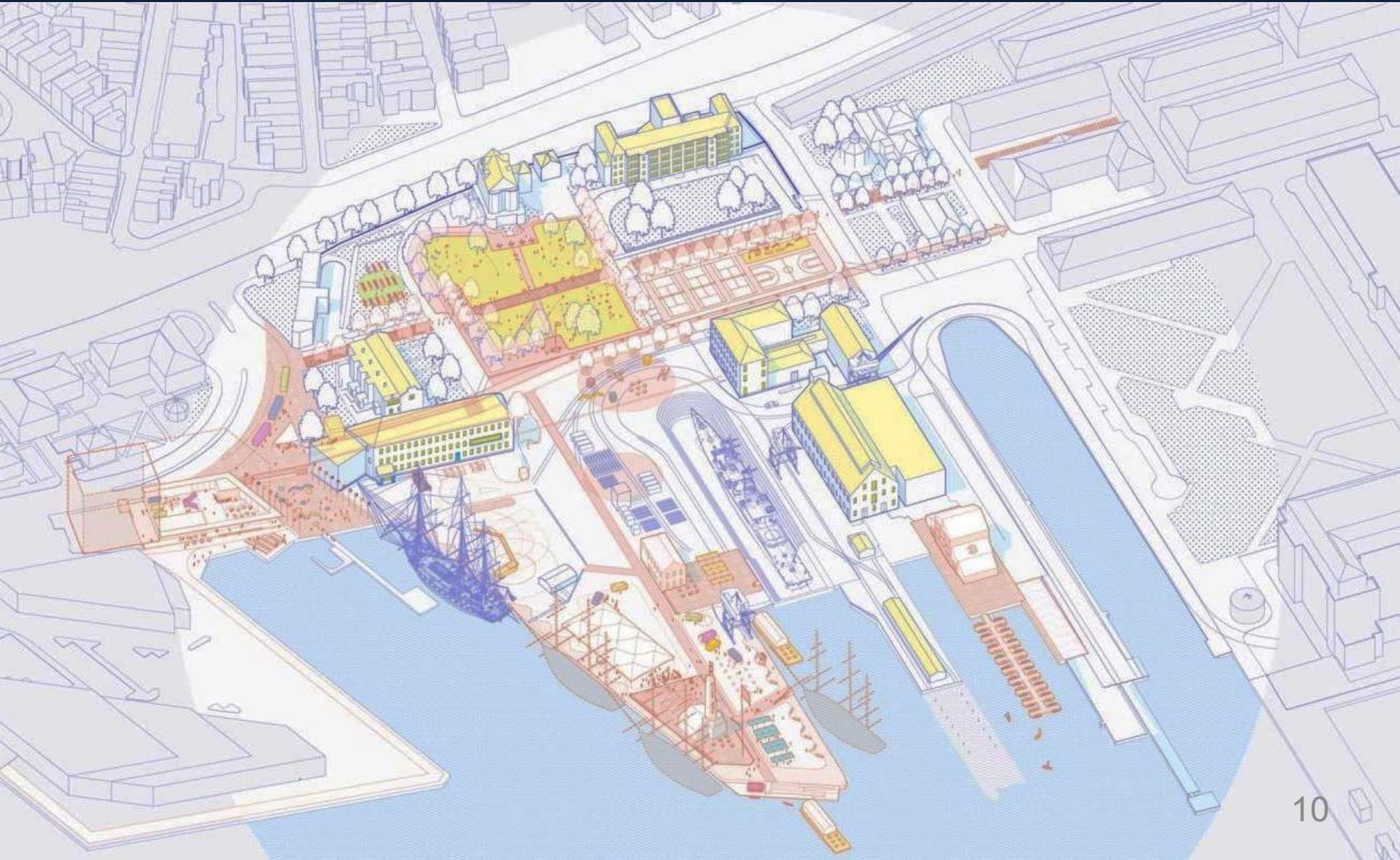
 **CharlestownNavyYard.org**
#66fromnewlondon

For inquiries, email
christina_briggs@nps.gov

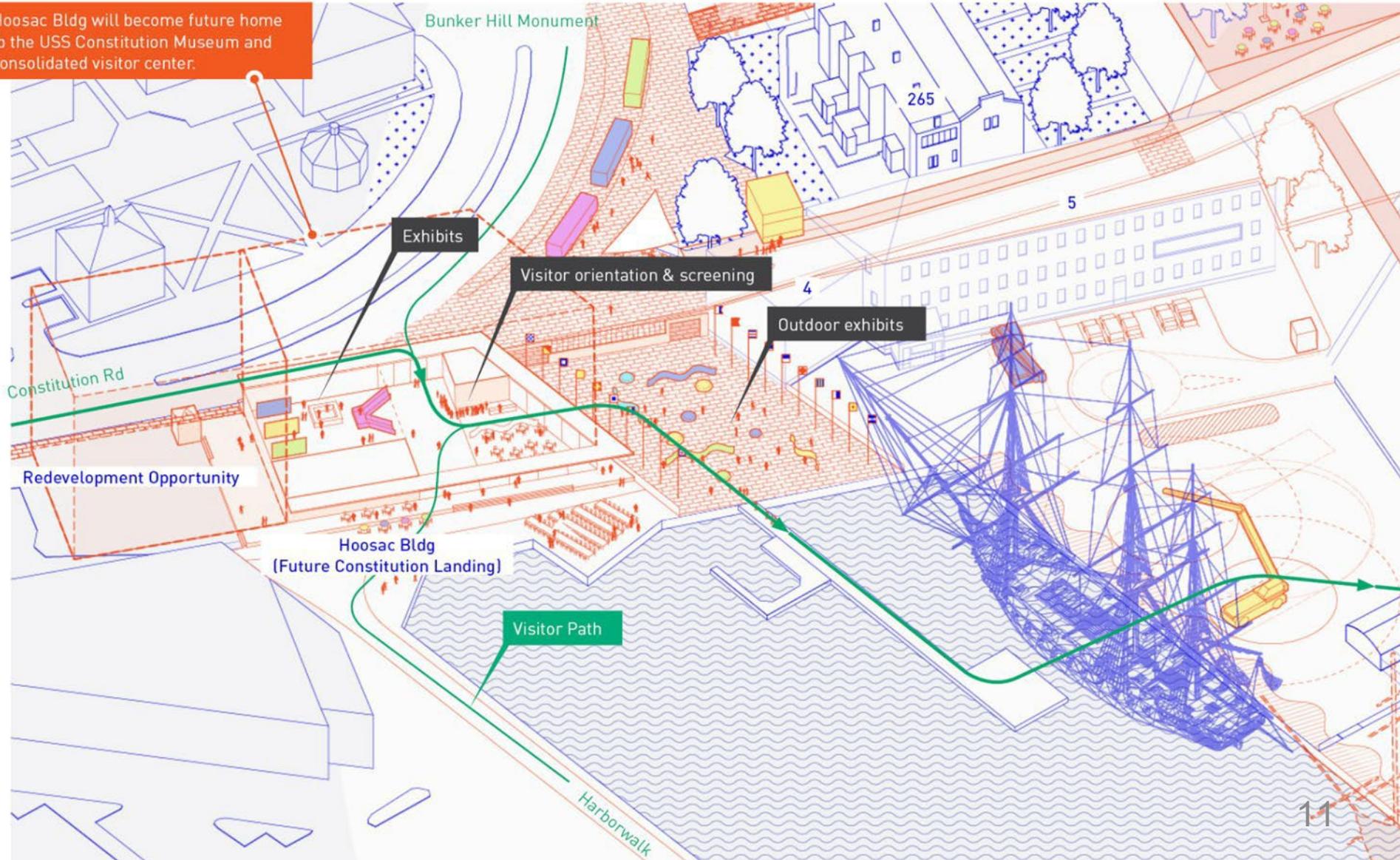
2017 -2018

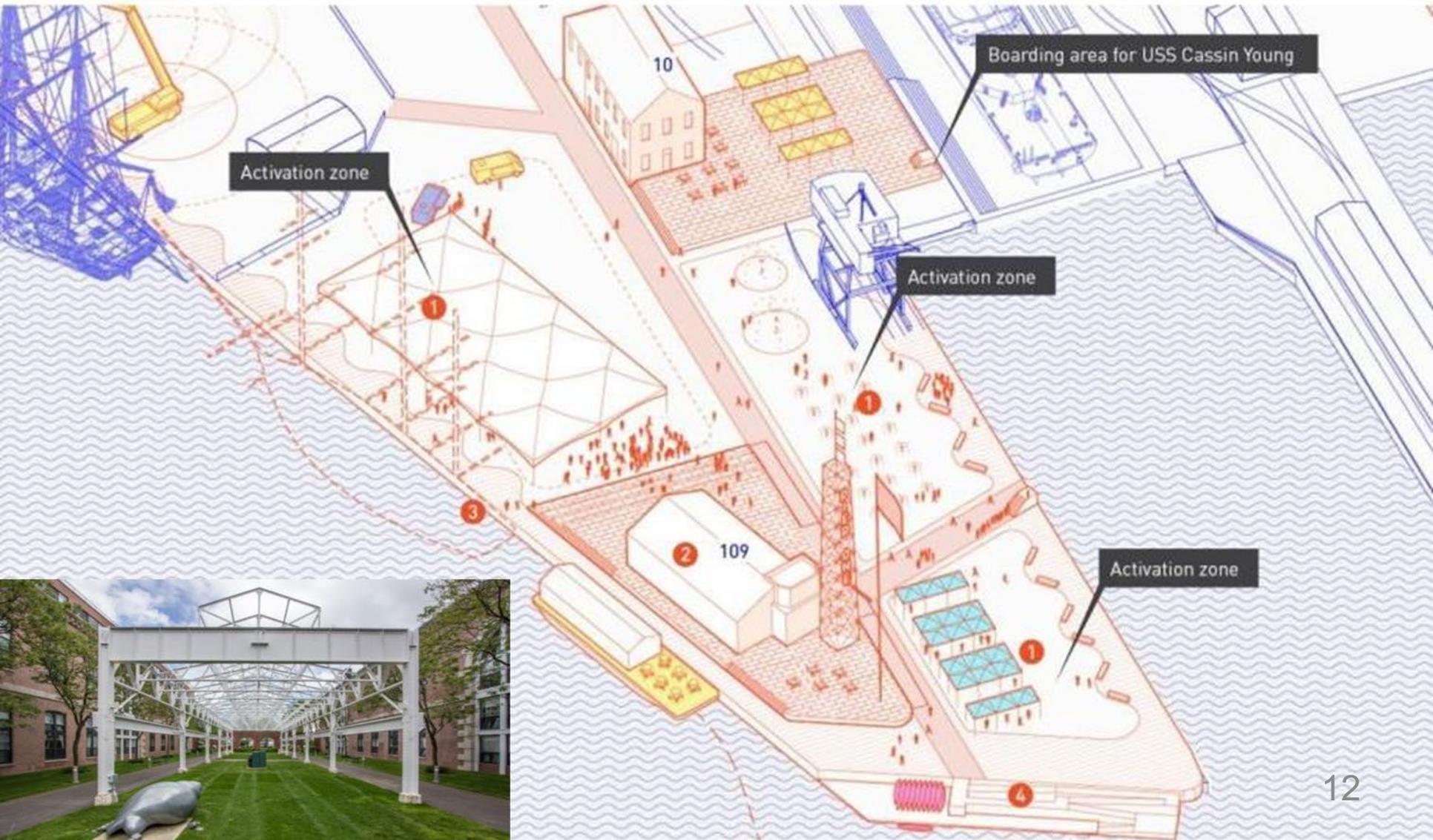
Navy Yard Partners launched an 18-month Visitor Experience planning process

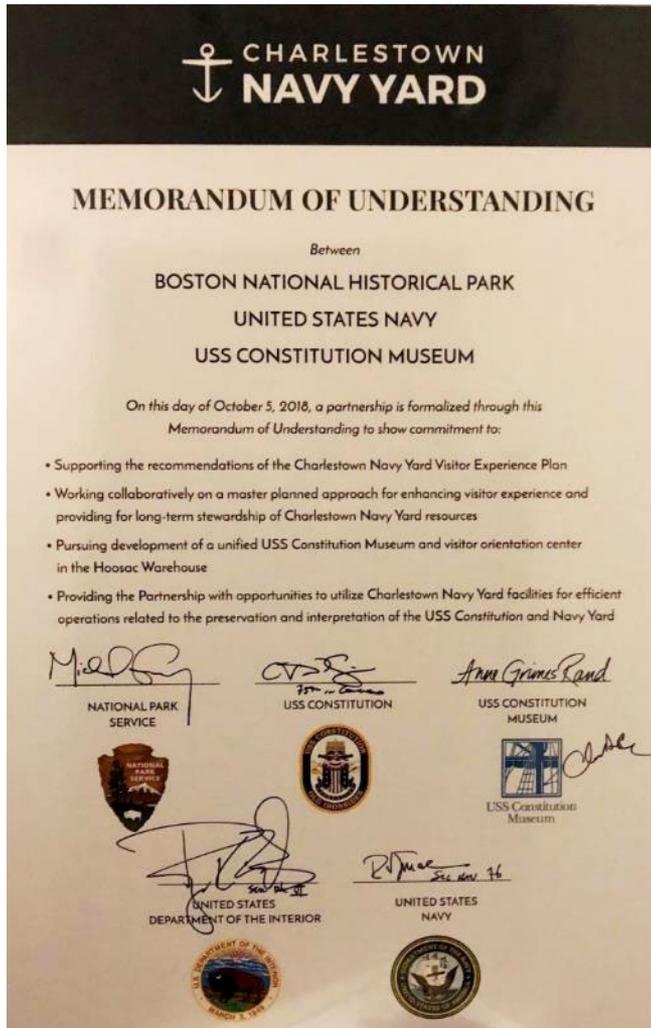
Public Engagement: visioning sessions, charettes, open houses, and plan reviews



Hoosac Bldg will become future home to the USS Constitution Museum and consolidated visitor center.







2018



- **Memorandum of Understanding signed to formalize Partnership:** Secretary of the Interior; Secretary of the US Navy; Commanding Officer, USS *Constitution*; President, USS *Constitution* Museum; Chief of Environment, City of Boston; Superintendent, National Parks of Boston
- \$3M to conduct feasibility studies and design plans

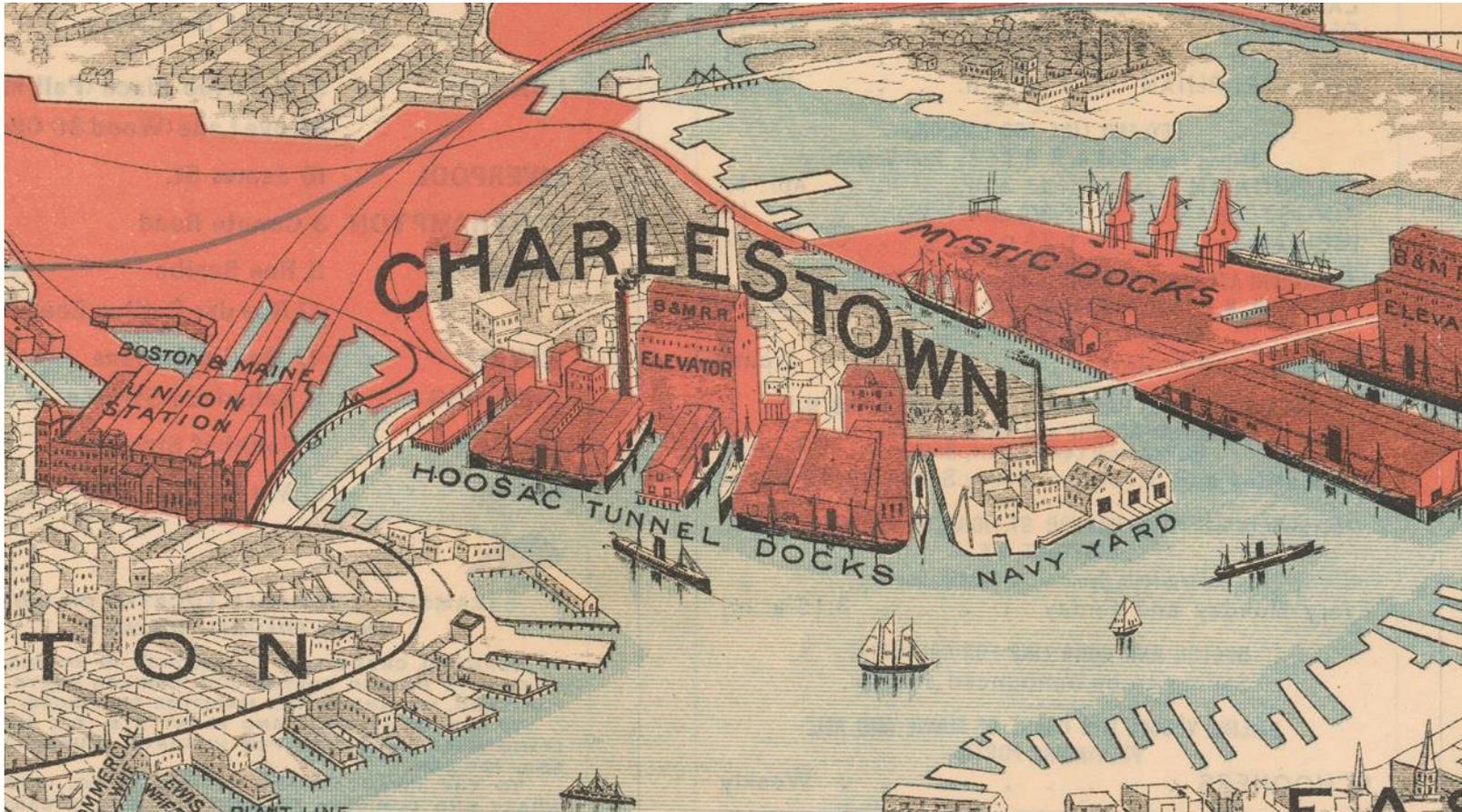


CHARLESTOWN NAVY YARD

Master Development Strategy *Historic Context & Hoosac Feasibility*



1900 Plan of Hoosac Tunnel Docks



1955 aerial view of the Hoosac Docks and Industrial Landscape



1974 aerial view showing demolition of several buildings outside the yard for additional parking. The Mystic River Bridge and Central Artery connector is on the left, and the Hoosac Stores building is on the right.
(BOSTS-8874, 8674)



1974 aerial view showing demolition of several buildings outside the yard for additional parking. The Mystic River Bridge and Central Artery connector is on the left, and the Hoosac Stores building is on the right.
(BOSTS-8874, 8674)



Table of Contents

EXECUTIVE SUMMARY

- 8 Introduction
- 10 PDS Submission #2 Goals
- 12 Opportunities and Challenges

HISTORIC RESEARCH AND DOCUMENTATION

- 16 Historic Research and Documentation

EXISTING CONDITIONS INVESTIGATION AND ASSET CONDITIONS

- 40 Architecture
- 42 Regulations and Standards
- 44 Zoning
- 48 Site Conditions Adjacent to Hoosac
- 52 Building Enclosure and Roof
- 56 Interior Construction
- 56 Accessibility
- 58 Weather Event Risk Factors
- 58 Sustainability and Energy Performance
- 60 Structure and Building Systems
- 63 Structure
- 76 Electrical
- 80 Plumbing
- 84 Hazardous Materials
- 142 Security

MUSEUM / VISITOR CENTER PROGRAM EXPLORATION

- 164 Intake: Research and Discovery
- 170 Vision and Themes
- 186 Audience
- 200 Exhibition and Interpretive Content
- 232 Display Methods and Technology
- 252 Appendix: NP and USSCM Inspiration

APPENDIX

- 288 Previous Planned Capital Improvements



Figure 16. Exposed Structure Lower Floors



Figure 17. Exposed Structure Upper Floors



Figure 18. Depth of Floor Girders Dividing Floors into "bays"



Figure 19. Depth of Floor Girders Dividing Floors into "bays"

Wood: The columns and beams are southern pine of high grade

Steel: Lower strength in some steel caps; recommend capping the yield strength a little lower than 36ksi to cover any variability

Brick and Mortar: Compression testing results indicate that the brick compressive capacity is good

Mortar Analysis: Fair condition



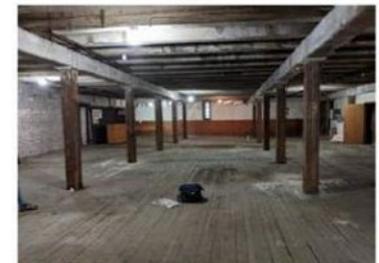
① (E) COND. NO. 3 GRADE TYP



② LEVEL 3 - BEAM SAMPLE LEVEL



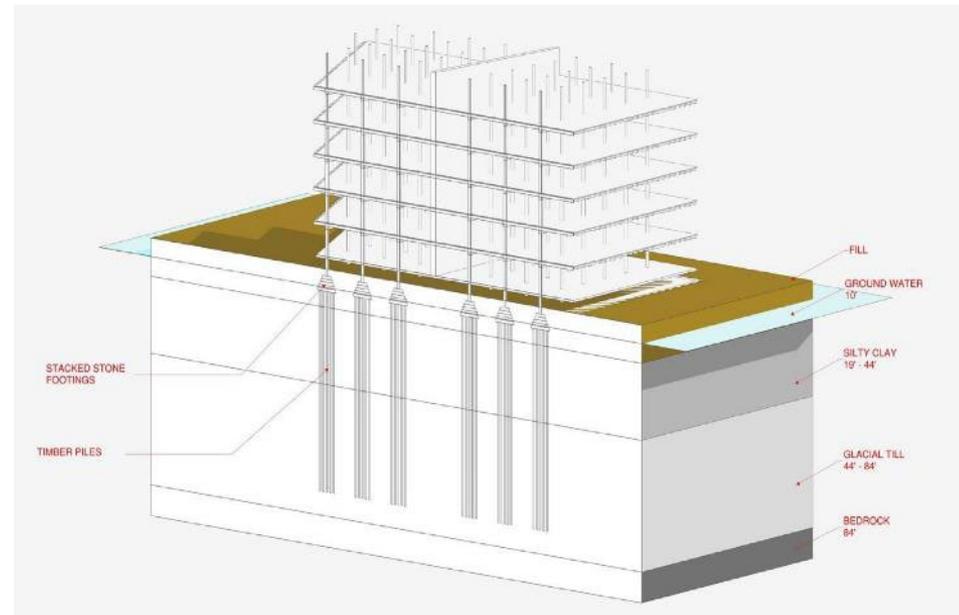
⑥ LEVEL 5 COL. SAMPLE



⑩ (E) COND. LEVEL 5

Existing footings – Timber Piles:

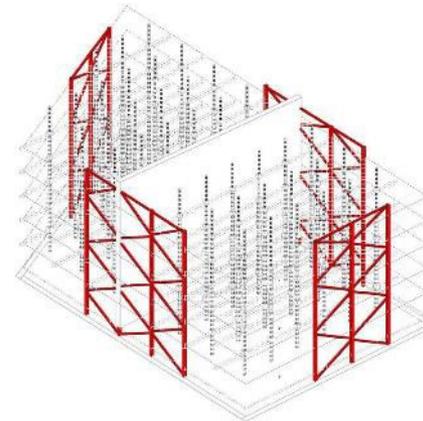
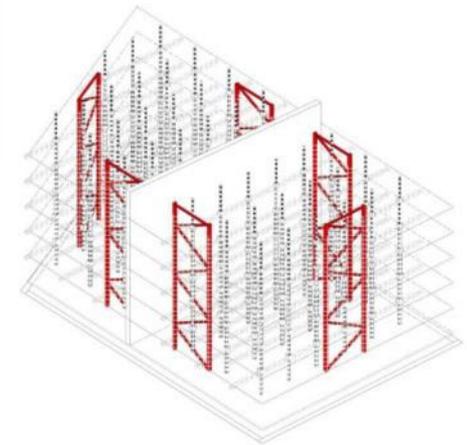
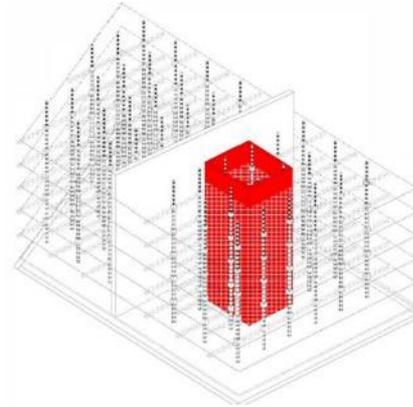
- Can carry the original “vertical” load.
- Rest on granite blocks and susceptible to shifting.
- Do not have capacity to resist “lateral” loads (wind load and seismic load) – retrofitting design required.
- No presence of hazardous materials on vacant lot.



Seismic Retrofit Strategy

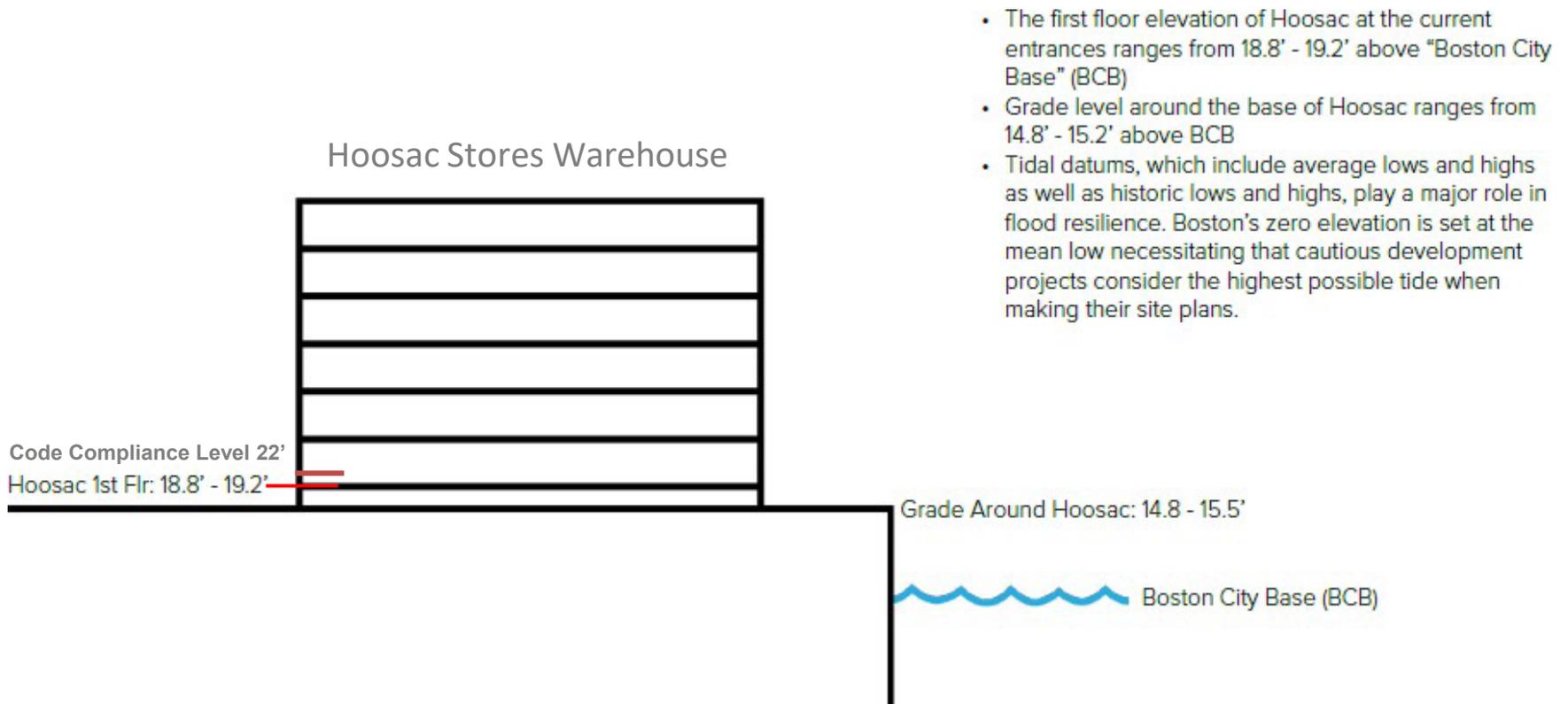
Major deficiencies categorized in three aspects:

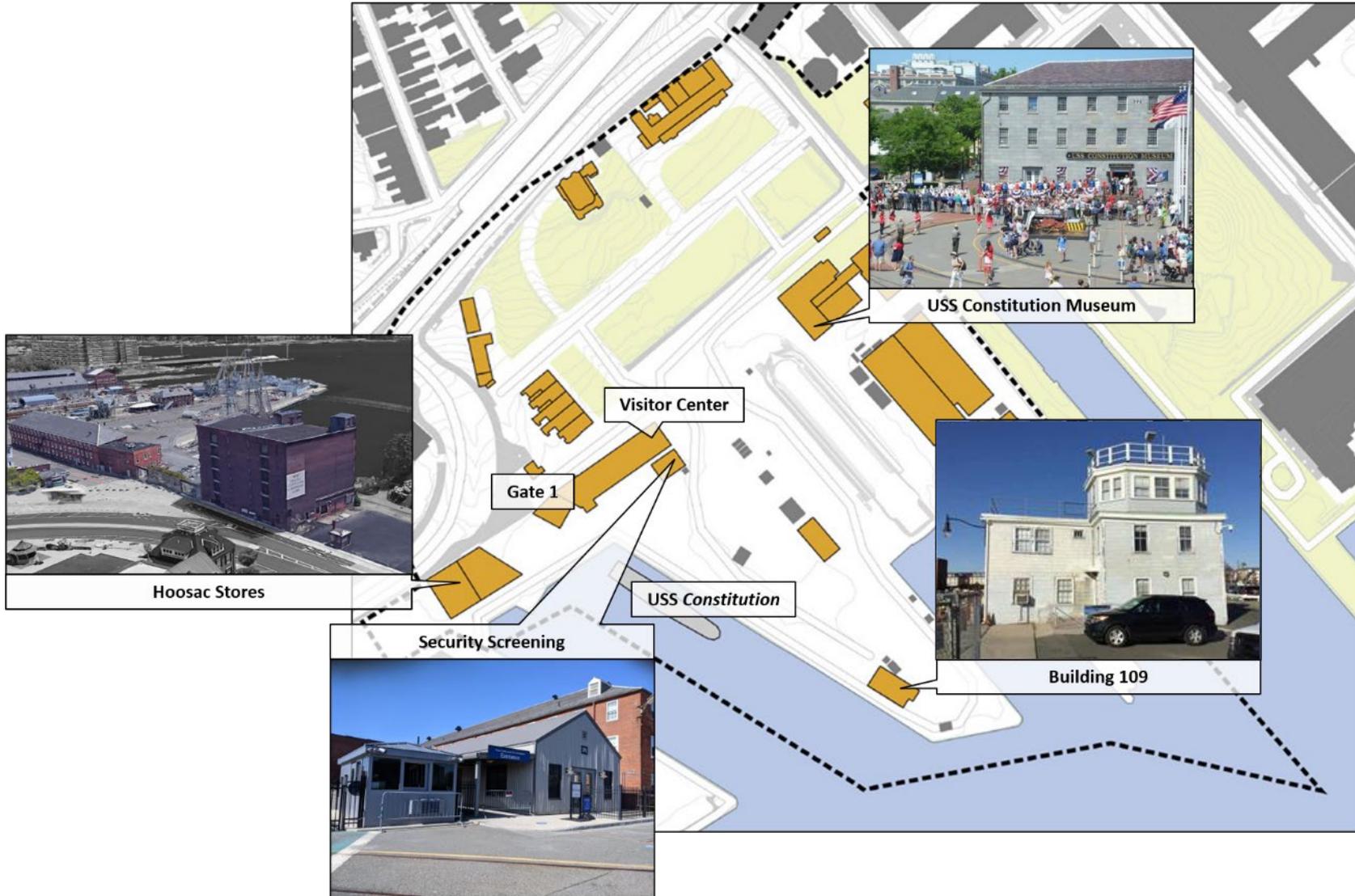
1. Deficient out-of-plane capacity of URM (un-reinforced masonry) walls
2. Deficient foundation including lateral resistance and its connections to URM walls
3. Deficient diaphragm and connections to transfer loads from shear resisting system to the rest of building



Flood Resiliency and Precedent

Retrofitting the Hoosac Building: Preliminary Considerations





Pier One & Building 109

- Pier 1 anchored a large Coal Handling Plant (circa 1900) and was demolished in the 1930's
- Building 109 was established as a Power Sub-Station was built in 1937
- Bldg. 109 was enlarged during WWII (1940-42) to serve as a Waterfront Operation Center for pilots and tug masters managing ship traffic in Boston Harbor



Coal Handling Plant



Building 109: Power Sub-Station



Building 109 Today



Building 109 – Pilot House

HOOSAC STORES

- Built in 1895 as a purpose-built warehouse.
- Six-story, 60,000+ sq', six-bay-by-three-bay, heavy timber and steel construction.
- Built by Fitchburg Railroad as a wool storage facility, it was sold to Boston & Maine Corp. and then to W.F. Schraft & Son.
- National Park Service purchased the property in 1981 because of its proximity to the Navy Yard.
- Listed on the National Register of Historic Places in 1985 possessing local and state significance.



Historic Resources

HOOSAC STORES:

- Would continue to accumulate deferred maintenance (currently @ \$72M)
- Degradation of building while NPS seeks funding for renovation and priorities allow
- Continued vacant and blighted building along Constitution Road, within park

BUILDING 109:

- Continued NPS use, structural and maintenance issues would be addressed as funding and priorities allow
- Environmental issues will be addressed as funding/priorities becomes available
- Flooding will continue to impact structure and operations

Visitor Use and Experience

HOOSAC STORES

- Hoosac Stores would remain vacant, current condition would remain a non-welcoming approach for the over 1 million people visiting the Navy Yard from the Freedom Trail
- Boston Harborwalk would remain a dead-end at CNY
- Challenging navigational issues for visitors continue as they seek to become oriented to the Navy Yard, tour the Museum and experience USS *Constitution* and USS *Cassin Young*

BUILDING 109:

- Decaying building detracts for visitor experience arriving from visiting ships onto Pier One and people touring the USS *Cassin Young*

Major Components:

- Hoosac site was determined to be the ideal location to serve as a gateway for millions of visitors arriving to CNY
- Integrated and collaborative NPS, Navy and USS Constitution Museum operations in a consolidated facility
- Preserves exterior elements of the Hoosac Stores
- Extensive retrofits needed to meet safety, building code, and projected sea level rise
- Extensive interior retrofits needed to achieve program goals (new floor plates, raise ceiling heights, create openings in exterior walls for windows and doors, modifying first floor elevation, etc.)
- Propose demolition of Building 109



Historic Resources

HOOSAC STORES:

- Existing footprint and massing would essentially be preserved
- More than 25% of the exterior would require penetration for windows and doors; curtain wall on north and east elevation would remove historic fabric
- Interior alterations would remove character defining features
- Work proposed would require extensive alterations, likely have an adverse impact
- Mitigation would include photo documentation of the current building and possible reuse of building materials

BUILDING 109:

- Demolition will be an adverse impact, NPS to mitigate through documentation

Visitor Use and Experience

HOOSAC STORES

- Hoosac Stores becomes the CNY Gateway and destination people visiting CNY
- Navigational issues throughout CNY for visitors would greatly improve
- Utilizing the current building configuration would limit the ability for partner operations to achieve its vision for a creative museum/orientation environment
- Allows for greater education opportunities between the Museum/Visitor Center and the USS *Constitution*/Navy Yard
- During construction, visitors and the community would experience short-term impacts

BUILDING 109

- A new shade pavilion with visitor amenities would improve experience on Pier 1
- Demolition would have short-term impacts on visitors

Major Components:

- Hoosac site was determined to be the ideal location to serve as a gateway for millions of visitors arriving to CNY via trolley, Freedom Trail, bike path, or NPS parking within Nautica parking garage
- Based on feasibility study analysis, Hoosac Stores would be razed and a new facility would be constructed integrating NPS, Navy and USS Constitution Museum operations
- Building program would allow for engaging spaces; square footage would be reduced to meet operational needs (approx. 34,000 sq')
- Gateway Center would provide welcoming and engaging experiences for all people – engaging museum experiences before touring USS Constitution; an elevated visitor center with views of the Navy Yard, Charlestown, Bunker Hill, Boston Harbor, and the City skyline; restaurant and retail store
- Constitution Plaza, connecting with the Harborwalk, would provide spaces for taking in the views, special events, Naval ceremonies and pageantry, and hands-on educational programming



Historic Resources

HOOSAC STORES:

- Proposal would raze Hoosac Stores and construct a new facility that would house the USS Constitution Museum, US Navy security and NPS Visitor Center, connecting visitors through a new gateway to the Navy Yard / USS *Constitution* and Harborwalk
- Mitigation would include historic documentation (HABS/HAER), Updating Hoosac Stores 1,2,3 NRHP documentation, reuse of building materials (timbers and brick) into new building and other CNY landscapes and buildings

BUILDING 109:

- Demolition will be an adverse impact, NPS to mitigate through photo documentation as an addendum to the existing CNY HABS/HAER report
- New open frame structure would be constructed on the footprint of Bldg. 109, reflecting mass, scale and building location; interpretive opportunities

Visitor Use and Experience

HOOSAC STORES

- Hoosac Stores becomes the CNY Gateway and destination for the over 1 million people visiting the Navy Yard
- Navigational issues throughout CNY for visitors would greatly improve
- An integrated partner operation would allow visitors to orient themselves to the Navy Yard, Charlestown, Freedom Trail and Harborwalk; engage people of all ages in a creative museum environment and allow for a seamless connection to the ship
- During construction, visitors and the community would experience short-term impacts from increased noise and traffic; mitigation measures would be put in place to reduce impacts over the 8 – 14 weeks of demolition and salvage.

BUILDING 109

- Pier 1 would be activated into a dynamic waterfront space – the new pavilion would provide visitor amenities (shade, rest rooms, views and interpretation)
- During construction, visitors and the community would experience short-term impacts from increased noise and traffic



Major Components:

Proposed Action: Demolition of Building 109

- Built as a temporary structure it currently has issues with structural integrity, hazmat, flooding, sea level rise impacts, and high cost to rehabilitate

Proposed Action: Installation of Open Frame Shade Pavilion

- Construction of an open frame, “ghost structure” to activate Pier One – pavilion would serve visitors coming arriving on ferries, provide CNY orientation and interpretation
- Provide utilities and possibly rest rooms for special events, visiting ships and programming
- Provides much needed shade along Pier One



Open Frame Structure at Parris Landing



Franklin Court, Independence National Park, Phila.



Major Components

Proposed Action: Demolition of Hoosac Stores

- Attempted to lease building multiple times with no success
- Visitor Experience Plan identified the Hoosac site as the best location for CNY partners to consolidate operations and better connects people to this special place
- Partners developed schematic designs and feasibility studies for a renovated Hoosac Stores
- Extensive analysis of the building's structural integrity, ability to meet partner program needs and high costs led to a preferred option to build a new Gateway Center for the Navy Yard

Major Components

Proposed Action: CNY Gateway Center

- Consolidates partner operations for NPS visitor center, USS Constitution Museum and Navy security
- Ideally located, we imagine a Gateway Center welcoming over 1 million guests from around the corner and around the world – serving as both a **port** on the Freedom & Harbor Trails and a **portal** to CNY's site's rich history, contemporary relevance and possible futures
- We imagine a destination for guests to gather, offering a place to refresh and recharge amongst sweeping views of Boston and orient guests to the stories, activities and sights available to them
- We imagine an engaging Museum that creates memorable moments and lasting learning through experiences that engage our emotions and senses, leading to a tour led by US Navy sailors aboard the U.S. Ship of State, *USS Constitution*
- We imagine the merger between the Freedom Trail and the Harborwalk – a sought out destination that connects Charlestown in a unique way





NEXT STEPS

January 3, 2023	Publication of EA, start of 30-day comment period
January 18, 2023	Virtual public meeting
February 9, 2023	End of public comment period
February – March 2023	Review of public comments

HOW TO COMMENT



1. **Submit comments electronically at the project website** (preferred):
<https://parkplanning.nps.gov/cnystrategy>



2. **Submit written comments to the park's headquarters in Charlestown, MA by mail to:**

CNY Master Development Plan Project
Superintendent Michael Creasey

Boston National Historical Park
21 Second Ave
Charlestown, MA 02129